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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHORBAJI, MONZER R

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,364

Applicant(s)

COSTA ET AL.

Examiner

MONZER R. CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This final action is in response to the amendment received on 01/13/2005

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Messinger et al (U.S.P.N. 4,617,117).

With respect to claim 1, the Messinger reference discloses a vessel (the chlorinator in figure 2) including the following: an inlet (figure 2, 7), an outlet (figure 2, 12), a base (unlabeled bottom of 1 in figure 2), an interior volume (figure 2, internal volume of housing 1) in fluid communication with the inlet and outlet (col.4, lines 55-64), a wall with an opening therein (col.4, lines 60-64 and figure 2, unlabeled opening in bottom wall of housing 1 that connects 11 with 12), a cover (figure 2, 4) having a periphery (figure 2, 20) for closing the opening in the wall (figure 2, unlabeled walls have having an opened top end 3) of the interior volume and a cap assembly (col.5, lines 5-6 figure 2, unlabeled top cover surrounding at least a portion of the periphery (in figure 2, 17) so that rotation of the cap assembly forces the cover against the opening (col.5, lines 36-45), sealing it, counterrotation of the cap assembly forces the cover away from the opening, unsealing it (col.5, lines 52-59) and both forces are applied principally at the periphery of the cover (in col.5, lines 9-12 and figure 2 parts 4 and 16-18, when the

top cover including cover 4 is screwed onto the wall of housing 1, the force is only applied at the peripheral part 20 of cover 4 where ledge 17 presses downward on 20 and when unscrewing of the top cover including cover 4 forces ledge 17 of top cover away from 20, which results in forcing 20 from the top portion of the wall of housing 1). Thus, screwing the top cover and unscrewing the top cover result in two forces occurring only at the periphery 20 of cover 4.

With respect to claim 12, the Messinger reference discloses a vessel (the chlorinator in figure 2) including the following: a base (unlabeled bottom wall of housing 1 in figure 2), a generally cylindrical wall extending upward from the base (figure 2, unlabeled walls of housing 1) and having an interior surface and a threaded exterior surface (figure 2, threads on exterior of housing 1), a jack ring (figure 2, 16) defining an interior surface having threads (figure 2, unlabeled threads on interior surface of jack ring 16) for engaging the threads present on the exterior surface of housing 1, a ledge (figure 2, 17), a cap (col.5, lines 5-6, top cover) integrally formed with the jack ring (figure 2, 16), a cover (figure 2, 4) that includes a peripheral flanged portion (figure 2, 20), central portion (unlabeled central part of 4 in figure 2), a wall extending from the central portion (unlabeled extending downward wall of 4 in figure 2), the peripheral flanged portion (figure 2, 20) is sandwiched between the cap (figure 2, top cover) and jack ring (figure 2, 16) in contact with the ledge (figure 2, 17) so that loading (the ledge 17 presses onto 20 with a force and 20 presses back with an opposite and equivalent force against 17 and this counterforce is equivalent to "forcing the peripheral flanged portion against the ledge") of the cover (figure 2, 4) occurs principally by forcing the

peripheral flanged portion (figure 2, 20) against the ledge (figure 2, 17), unloading (the ledge 17 presses onto 20 with a force and 20 presses back with an opposite and equivalent force against 17 and this counterforce results in forcing the peripheral flanged portion away from the ledge) of the cover occurs principally by forcing the peripheral flanged portion (figure 2, 20) away from the ledge (figure 2, 17), the wall friction-fitted into contact with the generally-cylindrical wall (unlabeled extending downward wall of 4 in figure 2) when the threads of the jack ring (figure 2, 18) engages the threads of the generally-cylindrical wall (figure 2, 1), the wall defining a groove with an o-ring positioned within it (figure 2, 6) and water-purification material contained within the generally-cylindrical wall (col.4, lines 65-68).

With respect to claims 2-6, 10-11 and 13, the Messinger reference teaches the following: the cover includes a flange forming the periphery (figure 2, 20), the cover includes a central portion (unlabeled central part of 4 in figure 2) bounded by the flange (20) and a first wall extending from the central region (unlabeled extending downward wall of 4 in figure 2), a base (unlabeled bottom of 1 in figure 2) and a second wall extending from the base (unlabeled walls of 1 in figure 2), a ring (18), a cap integrally formed with the ring (col.5, lines 5-6, top cover), a jack ring and a cap integrally formed with the jack ring (col.5, lines 4-12 and figure 2, 16 and 18), the cover has a ridged upper surface (unlabeled ridged upper surface of 4 in figure 2), a sealing ring (figure 2, 6) within a groove (unlabeled groove in figure 2) of the first wall of the cover, and the second wall is tapered (for example, the unlabeled right wall in figure 2 of housing1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messinger et al (U.S.P.N. 4,617,117) as applied to claim 6 and further in view of Cooper (U.S.P.N. 4,316,801).

The teachings of the Messinger reference have previously been set forth with regard to claims 1-6 and 10-13; however, with respect to claim 7, the Messinger reference fails to show that the jack ring and the cap can be connected and disconnected from each other. The Cooper reference shows a jack ring (figure 2, 10) and a filter head, i.e., cap (figure 2, 2) that can be connected and disconnected from each other using corresponding threads as shown in figure 2. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a threaded cap as shown in the Cooper reference for the integrally formed cap since such a substitution is a matter of choice of design evidenced by the cap of the Messinger reference.

With respect to claims 8-9, the Messinger reference discloses the following: a vessel that includes a water-purification material is positioned (col.4, lines 65-68), a jack ring (figure 2, 16) defining a ledge (figure 2, 17), a cap (col.5, lines 5-6, top cover) integrally-formed with the jack ring (col.5, lines 4-9) and the cover (figure 2, 4) contacts the ledge (figure 2, 17 and 20).

Response to Arguments

7. Applicant's arguments filed 01/13/2005 have been fully considered but they are not persuasive.

On page 7 of the Remarks section, applicant argues that, "Messinger does not disclose of suggest a device where an unloading force is exerted on the periphery of a cover to remove the cover from the device." The examiner disagrees. In amending independent claims 1 and 12, applicant referred to page 3, line 18 to page 4, line 2 for

support of the concepts of loading and unloading. Unloading is equivalent to unscrewing the jack ring leads to lifting both the cover and cap, which is exactly how the Messinger device operates (col.5, lines 52-57). Further, according to the applicant's definition of the unloading process, the Messinger unloading of the cover (4) occurs mainly at the periphery of the cover (20) against the unlabeled upper surfaces of the walls of the housing (1) where the portion of the cover (20) at which contact with the jack ring (18) and the cap (16) occurs. As a matter of fact, loading and unloading occurs only at the peripheral region (20) of cover (4) where the peripheral region of the cover contacts the upper surfaces of chamber. In addition, when the cover (16) including the removable cover (4) is to be removed (col.5, lines 52-57), the top (18) is unscrewed, the unloading forces (operator's hands applying force to remove the cover) are occurring mainly at the periphery of the cover since the cover contacts the top of the walls of the chamber only at its periphery (20). The function of the central boss (25) is for connecting the cover to the cap only. For example, in col.5, lines 52-57, the Messinger reference explains removing the jack ring assembly by unscrewing the jack ring (16) that result, in connection between the cover (16) and the flange (28). The cover (16) lifts (unloading forces) the removable cover (4) at the periphery because during the unscrewing of the cover (16) the threads (18), which are part of the cover (16), lift the removable cover (4) at the periphery (20) away from the surfaces of the upper walls of the chamber and not the central boss (25). The central boss is only for connection during loading and unloading. Then after the cover (16) has completely been unscrewed, then the operator lifts the cover (16) with the removable cover (4) in connection through the central boss

(25) away for inspecting the inside of the chamber. Clearly, screwing and unscrewing the cover (16) through threads (18) results in bring together or away from each other the peripheral surfaces of the cover (4) and the upper surfaces of the chamber. The Messinger reference teaches (col.5, lines 45-49) that screwing the top (16) results in the ledge (17) pressing the flange (20, periphery) against the upper walls of the chamber and not the central boss (25). In both loading and unloading processes, the forces are acting at the flange (20) due to the threads (18) at the periphery.

On page 8 of the Remarks section, applicant argues that, "These clearly indicate that the sole unloading force lifting the cover off of the device when the jack ring is unscrewed is applied at the central boss, in contradistinction to Applicant's claims." The examiner disagrees. In col.5, lines 36-57, the Messinger reference teaches that screwing the cover (16) onto the upper surfaces of housing (this step is equivalent to loading) at the periphery (4, 20 and 17) results in sealing the cover (16) to the housing. In addition, unscrewing the cover (16) through the threads (18) at the periphery (4, 20 and 17) results in pushing the cover away from the housing (this step is equivalent to unloading) at the periphery prior to removing the cover (16), which is connected to removable cover (4) through central boss (25). Thus, the Messinger device applies pressure at the periphery during loading (forcing cover against the housing in a sealing manner at the periphery by screwing the cover onto the housing) and unloading steps (forcing the cover away from the housing at the periphery by unscrewing the cover away from the housing).

On page 9 of the Remarks section, applicant argues that, "Eliminating this central boss and the retaining screw would essentially destroy the invention of Messenger et al., leaving no way to effectively exert forces to remove the cover from the device." The examiner disagrees. Unscrewing cover (16) through threads (18) does result in moving the cover away from the housing such that no sealing between the two exist.

On pages 9-10 of the Remarks section, applicant argues that, "Thus, combining the teachings of Cooper et al. with those of Messenger et al. would actually teach away from the claimed invention: one of ordinary skill in the art would simply turn the device of Messenger et al. upside down and allow the cover to simply fall away from the housing." The examiner disagrees. The Cooper reference is combined only to show that having a jack ring that can be separated from the cap is known and has nothing to do with how a device can function. The jack ring and the cap are connected together in the Messinger reference. For example, the cap (16) and the jack ring (18) can be separated without turning the device upside down and unscrewing of the ring (18) would unseal the cover (4) from the housing (1). Further, the Cooper reference teaches that the filter assembly can be oriented in any direction (col.8, lines 42-49). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a threaded cap as shown in the Cooper reference for the integrally formed cap since such a substitution is a matter of choice of design evidenced by the cap of the Messinger reference.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
9. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MONZER R. CHORBAJI** whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **JOHN KIM** can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji *MRC*
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04/08/2005


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